

B. Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

1. (currently amended) A ~~haptotactic-peptide~~haptotactic peptide-liposomal composition comprising ~~at least one type of an isolated haptotactic peptide comprising from 21 to 40 amino acids of SEQ ID NO:1 and at least one type of liposome, wherein the haptotactic peptide is characterized in that it elicits~~induces cell attachment to the composition ~~responses and having an amino acid sequence that is at least 60% homologous to a haptotactic peptide present within the carboxy termini of fibrinogen chains, and wherein the at least one liposome has at least one lipid bilayer enclosing an aqueous compartment.~~

2-6. (canceled)

7. (currently amended) The composition of claim 1 characterized in that uptake of the ~~haptotactic-peptide~~haptotactic peptide-liposomal composition by mammalian endothelial or fibroblast cells is enhanced at least 2 fold compared to the uptake of said liposomes absent said haptotactic peptide.

8. (currently amended) The composition of claim 1 wherein the liposomes comprise at least one ~~[[of]]~~ member selected from the group consisting of: phospholipids of natural or synthetic origin; phospholipids combined with polyethylene glycol; phospholipids combined with glycerides; phospho amino lipids cerebroglucosides, and gangliosides; ~~optionally further comprising natural or synthetic cholesterol.~~

9. (currently amended) The composition of claim 1 wherein the liposomes further comprise at least one biologically active compound.

10. (currently amended) The composition of claim 9 wherein the at least one biologically active compound is selected from the group consisting of polynucleotides, proteins, peptides, polysaccharides, hormones, drugs, steroids, fluorescent dyes and radioactive markers.
11. (currently amended) A method for enhancing liposome uptake into cells, comprising ~~providing a haptotactic-peptide liposomal composition according to claim 1, and~~ contacting cells with ~~said~~the haptotactic peptide-liposomal composition of claim 1, wherein liposomal uptake by the cells is enhanced at least two fold compared to the uptake of said liposomes absent the haptotactic peptide.
12. (currently amended) The method of claim 11 wherein the haptotactic~~[[-]]~~peptide - liposomal composition is produced *ab initio* with at least one type of ~~[[H]]~~haptide.
13. (currently amended) The method of claim 11 wherein the haptotactic~~[[-]]~~peptide - liposomal composition is produced extemporaneously using preformed vesicles combined with at least one type of ~~[[H]]~~haptide.
14. (currently amended) The method of claim 12 wherein the ~~method of producing the~~ haptotactic~~[[-]]~~peptide - liposomal composition ~~comprises the step of~~ is further produced by the method comprising dispersing lipophilic and amphiphilic components and at least one type of haptotactic peptide in an aqueous solution.
- 15-19. canceled
20. (currently amended) The method of claim 11 wherein the lipid phase of the liposomes ~~comprise~~comprises at least one member of the group consisting of phospholipids of natural or synthetic origin; phospholipids combined with polyethylene glycol; phospholipids combined with glycerides; phosphoaminolipids cerebroglucosides and gangliosides; ~~optionally further comprising natural or synthetic cholesterol.~~

21. (currently amended) The method of claim 11 wherein the cells are ~~selected from the group consisting of~~chosen from mammalian cells ~~including leukocytes,~~ and cells from mesenchymal origin ~~including astrocytes, chondrocytes, dendritic cells, endothelial cells, fibroblasts, glial cells, neurons, kidney cells, liver cells, melanocytes, mesenchymal cells, myofibroblasts, monocytes, parenchymal cells, pancreatic cells, smooth muscle cells and thyroid cells, malignant and transformed cells.~~

22. (currently amended) A method for enhancing intracellular uptake of biologically active compounds characterized by low-permeability through the cell membrane ~~using a haptotactic-peptide liposomal composition,~~ the method comprising the steps of ~~providing a haptotactic-peptide liposomal composition,~~ wherein the liposomes ~~comprise biologically active molecules characterized by low permeability through cell membrane,~~ and contacting cells with the haptotactic[[-]]peptide - liposomal composition of claim 9, wherein the ~~molecules uptake of said biologically active compounds~~ is enhanced at least two fold compared to the uptake of said molecules biologically active compounds detached from said haptotactic[[-]]peptide - liposomal composition.

23. (currently amended) The method of claim 22 wherein the haptotactic[[-]]peptide - liposomal composition is produced *ab initio* with at least one type of [[H]]haptide and at least one ~~type of~~ biologically active molecule.

24. (currently amended) The method of claim 22 wherein the haptotactic[[-]]peptide - liposomal composition is produced extemporaneously using preformed vesicles comprising at least one ~~type of~~ biologically active molecule combined with at least one ~~type of~~ [[H]]haptide.

25. (currently amended) The method of claim 23 wherein ~~the method of producing the haptotactic[[-]]peptide - liposomal composition comprises the step of~~ is further produced by the method comprising dispersing lipophilic and amphiphilic components, at least one ~~type of~~ haptotactic peptide and at least one ~~type of~~ biologically active molecule in an aqueous solution.

26-30. (canceled)

31. (currently amended) The method of claim 22 wherein the lipid phase of the liposomes ~~comprise~~comprises at least one member of the group consisting of phospholipids of natural or synthetic origin; phospholipids combined with polyethylene glycol; phospholipids combined with glycosides; phosphoaminolipids cerebroglucosides and gangliosides; ~~optionally further comprising natural or synthetic cholesterol.~~

32. (currently amended) The method of claim 22 wherein the cells are ~~selected from a group consisting of~~chosen from mammalian cells ~~including leukocytes, and cells from mesenchymal origin including astrocytes, chondrocytes, dendritic cells, endothelial cells, fibroblasts, glial cells, neurons, kidney cells, liver cells, melanocytes, mesenchymal cells, myofibroblasts, monocytes, parenchymal cells, pancreatic cells, smooth muscle cells, thyroid cells, malignant and transformed cells.~~

33. (withdrawn) The method of claim 22 wherein the biologically active compound within the liposomes is selected from the group consisting of polynucleotides, proteins, peptides, polysaccharides, hormones, drugs, steroids, fluorescent markers and radioactive markers.

34. (currently amended) A pharmaceutical composition comprising the ~~the~~ ~~haptotactic~~ ~~peptide-liposomal composition according to claim 1,~~ wherein the liposomes comprise at least one active ingredient having a diagnostic or therapeutic activity, and wherein said liposomes are formulated in a pharmaceutically acceptable diluent or carrier.

35. (currently amended) The pharmaceutical composition of claim 34 wherein the at least one active ingredient is selected from the group consisting of a cytotoxic compound, a cytostatic compound, an antisense compound, an anti-viral agent, a specific antibody and an imaging agent.

36. (currently amended) A cosmetic composition comprising the ~~[[H]]~~haptotactic ~~[[P]]~~peptide-~~[[L]]~~liposomal composition according to claim 1, wherein the liposomes comprise at least one active ingredient having a beneficial cosmetic effect ~~have a cosmetic beneficial effect~~.
37. (currently amended) A method for enhancing the delivery of a pharmaceutical therapeutic agent into cells comprising the step of administering to a subject in need thereof a therapeutically effective amount of ~~a haptotactic peptide-liposomal~~the pharmaceutical composition according to claim 34 wherein the liposomes ~~of the composition further comprise a pharmaceutically effective agent~~at least one active ingredient has therapeutic activity.
38. (currently amended) The method of claim 37 wherein the ~~pharmaceutical composition is administered~~administering step is performed parenterally, topically, orally or by inhalation.
39. (currently amended) A method for enhancing the delivery of a diagnostic agent into cells comprising the step of administering to a subject in need thereof a diagnostically effective amount of ~~a haptotactic peptide-liposomal~~the pharmaceutical composition claim 34, wherein the liposomes ~~of the composition further comprise a diagnostically effective agent~~at least one active ingredient has diagnostic activity.
40. (currently amended) The method of claim~~[[s]]~~ 39 wherein the ~~pharmaceutical composition is administered~~administering step is performed parenterally, topically or orally.
41. (currently amended) A method for enhancing the delivery of ~~cosmetically effective liposomes~~an active ingredient having a beneficial cosmetic effect into cells comprising the step of administering to a subject in need thereof ~~a haptotactic peptide-liposomal~~the cosmetic composition of claim 36 wherein the liposomes ~~of the composition have a cosmetic beneficial effect~~.
42. (canceled)

43. (currently amended) The method of claim[[s]] 41 wherein the ~~cosmetic composition is administered~~administering step is performed topically.

44-47. (canceled)

48. (new) The composition of claim 1, wherein said at least one liposome is classified as a small unilamellar vesicle, a large unilamellar vesicle, a reverse phase evaporation vesicle, a multilamellar large vesicle, a oligolamellar, and .

49. (new) The composition of claim 8, wherein the at least one liposome further comprises a natural or synthetic cholesterol.

50. (new) The method of claim 21, wherein the mammalian cells are leukocytes.

51. (new) The method of claim 21, wherein the cells from mesenchymal origin or chosen from astrocytes, chondrocytes, dendritic cells, endothelial cells, fibroblasts, glial cells, neurons, kidney cells, liver cells, melanocytes, mesenchymal cells, myofibroblasts, monocytes, parenchymal cells, pancreatic cells, smooth muscle cells, thyroid cells, malignant and transformed cells.

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